

## § 161.002-2

(b) The material approved for incorporation by reference in this subpart and the sections affected are as follows:

AMERICAN BUREAU OF SHIPPING (ABS)  
*American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Drive, Houston, TX 77060.*

Rules for Building and Classing Steel Vessels, 1996—161.002-4(b).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)  
*100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.*

ASTM B 117-97, Standard Practice for Operating Salt Spray (Fog) Apparatus—161.002-4

FACTORY MUTUAL ENGINEERING AND RESEARCH (FMER)

*Factory Mutual Engineering and Research, ATTN: Librarian, 1151 Boston-Providence Turnpike, Norwood, MA 02062.*

Class Number 3150: Audible Signal Devices, December, 1974—161.002-4(b).

Class Number 3210: Thermostats for Automatic Fire Detection, July, 1978—161.002-4(b).

Class Number 3230-3250: Smoke Actuated Detectors for Automatic Fire Alarm Signaling, February, 1976—161.002-4(b).

Class Number 3260: Flame Radiation Detectors for Automatic Fire Alarm Signaling, September, 1994—161.002-4(b).

Class Number 3820: Electrical Utilization Equipment, September, 1979—161.002-4(b).

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

*International Electrotechnical Commission, 1, Rue de Varembe, Geneva, Switzerland.*

IEC 60533, Electromagnetic Compatibility of Electrical and Electronic Installations in Ships, 1977—161.002-4(b).

INTERNATIONAL MARITIME ORGANIZATION (IMO)

*International Maritime Organization, Publications Section 4 Albert Embankment, London SE1 7SR, United Kingdom.*

International Convention for the Safety of Life at Sea, 1974 (SOLAS 74) Consolidated Edition (Including 1992 Amendments to SOLAS 74, and 1994 Amendments to SOLAS 74), 1992—161.002-4(b).

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

*National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269.*

NFPA 72, National Fire Alarm Code, 1993—161.002-4(b).

LLOYD'S REGISTER OF SHIPPING (LR)

*Lloyd's Register of Shipping, ATTN: Publications, 17 Battery Place, New York, NY 10004-1195.*

LR Type Approval System; Test Specification Number 1, 1990—161.002-4(b).

UNDERWRITERS LABORATORIES, INC. (UL)

## 46 CFR Ch. I (10-1-13 Edition)

*Underwriters Laboratories, Inc., 12 Laboratory Drive, Research Triangle Park, NC 27709-3995.*

UL 38, Standard for Manually Actuated Signaling Boxes for Use with Fire-Protective Signaling Systems, 1994—161.002-4(b).

UL 268, Standard for Smoke Detectors for Fire Protective Signaling Systems, 1989 (including revisions through June 1994)—161.002-4(b).

UL 521, Standard for Heat Detectors for Fire Protective Signaling Systems, 1993 (including revisions through October 1994)—161.002-4(b).

UL 864, Standard for Control Units for Fire-Protective Signaling Systems, 1991 (including revisions through May 1994)—161.002-4(b).

[CGD 94-108, 61 FR 28291, June 4, 1996; 61 FR 36787, July 12, 1996; 62 FR 23910, May 1, 1997; CGD 97-057, 62 FR 51049, Sept. 30, 1997; USCG-1999-5151, 64 FR 67185, Dec. 1, 1999; USCG-2000-7790, 65 FR 58464, Sept. 29, 2000; 69 FR 18803, Apr. 9, 2004; USCG-2013-0671, 78 FR 60160, Sept. 30, 2013]

### § 161.002-2 Types of fire-protective systems.

(a) *General.* Fire-protective systems covered by this subpart shall include, but not be limited to, automatic fire and smoke detecting systems, manual fire alarm systems, sample extraction smoke detection systems, watchman's supervisory systems, and combinations of these systems.

(b) *Automatic fire detecting systems.* For the purpose of this subpart, automatic fire and smoke detecting systems will be considered to consist of normal and emergency power supplies, a fire detecting control unit, fire detectors, smoke detectors, and audible and visual alarms distinct in both respects from the alarms of any other system not indicating fire.

(c) *Manual fire alarm systems.* For the purpose of this subpart, manual fire alarm systems will be considered to consist of normal and emergency power supplies, a fire alarm control unit, manual fire alarm boxes, and audible and visual alarms distinct in both respects from the alarms of any other system not indicating fire. Manual fire alarm systems are usually combined with automatic fire detecting systems.

(d) *Sample extraction smoke detection systems.* For the purpose of this subpart, Sample extraction smoke detection systems will be considered to consist of a control unit, a blower box, and a piping system to conduct air samples from the protected spaces to the control unit.

(e) *Watchman's supervisory systems.* For the purpose of this subpart, a watchman's supervisory equipment will be considered to be apparatus, either electrical or mechanical, used to verify the presence of watchmen and the regular performance of their assigned duties.

[CGFR 56-39, 21 FR 9032, Nov. 21, 1956, as amended by CGFR 70-143, 35 FR 19966, Dec. 30, 1970; CGD 94-108, 61 FR 28292, June 4, 1996]

#### § 161.002-3 Materials and workmanship.

(a) *Suitability.* All materials used in the construction of fire-protective equipment shall be of the quality best suited for the purpose intended.

(b) *Materials covered by reference specifications.* Where specifications are referred to for a given material, it is intended to require that the quality of material used shall be at least equal to that covered in the reference specifications.

[21 FR 9032, Nov. 21, 1956, as amended by CGD 94-108, 61 FR 28292, June 4, 1996]

#### § 161.002-4 General requirements.

(a) *Introduction.* The purpose of fire-protective systems is to give warning of the presence of fire in the protected spaces. To meet this end, the basic requirements of the fire-protective systems are reliability, sturdiness, simplicity of design, ease of servicing, and the ability to withstand shipboard shock and vibration and the adverse effects of sea humidity.

(b) *Standards.* (1) All fire-protective systems must be designed, constructed, tested, marked, and installed according to the applicable standards under § 161.002-1 and subchapter J (Electrical Engineering) of this chapter.

(2) All systems must be listed or certified as meeting these standards by an independent laboratory that is accepted by the Commandant under part 159 of this chapter for the testing and list-

ing or certification of fire detection equipment and systems.

(3) All parts of the system must pass the environmental tests for control and monitoring equipment in either ABS Rules for Building and Classing Steel Vessels Table 4/11.1 or pass the Category ENV3 tests of Lloyd's Register Type Approval System, Test Specification Number 1, as appropriate.

(4) Those parts of the system that are to be installed in locations requiring exceptional degrees of protection (defined in § 110.15-1 of this chapter) must also pass the salt spray (mist) test in either ABS Rules for Building and Classing Steel Vessels Table 4/11.1; Lloyd's Register Type Approval System, Test Specification No. 1; or ASTM B 117 (incorporated by reference, see § 161.002-1) with results as described in corrosion-resistant finish in § 110.15-1 of this chapter.

[21 FR 9032, Nov. 21, 1956, as amended by CGD 94-108, 61 FR 28292, June 4, 1996; 62 FR 23910, May 1, 1997; USCG-2000-7790, 65 FR 58464, Sept. 29, 2000; USCG-2004-18884, 69 FR 58350, Sept. 30, 2004]

#### § 161.002-8 Automatic fire detecting systems, general requirements.

(a) *General.* An automatic fire detecting system shall consist of a power supply; a control unit on which are located visible and audible fire and trouble signalling devices; and fire detector circuits, as required, originating from the control unit. Power failure alarm devices may be separately housed from the control unit and may be combined with other power failure alarm systems when specifically approved.

(b) [Reserved]

[21 FR 9032, Nov. 21, 1956, as amended by CGD 94-108, 61 FR 28292, June 4, 1996]

#### § 161.002-9 Automatic fire detecting system, power supply.

The power supply for an automatic fire detecting system must meet the requirements of § 113.10-9 of subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74 FR 125a, 47 FR 15279, Apr. 8, 1982]